

Title (en)

Fuel cell separator and fuel cell of solid polymer type

Title (de)

Brennstoffzellenseparator und Brennstoffzelle mit festen Polymerelektrolyten

Title (fr)

Séparateur de pile à combustible et pile à combustible à électrolyte polymère solide

Publication

EP 1094534 A2 20010425 (EN)

Application

EP 00309282 A 20001020

Priority

JP 29820399 A 19991020

Abstract (en)

A fuel cell separator having on one side or both sides thereof channels for gas supply and discharge formed from a compound composed mainly of thermosetting resin and graphite particles, characterized in having a flexural modulus equal to or lower than 20 GPa and a flexural strength equal to or higher than 50 MPa (both measured according to JIS K6911). A fuel cell system of solid polymer type in which part or all of its separators are the fuel cell separator defined above. Having high strength and low flexural modulus, the fuel cell separator does not break due to deformation at the time of fuel cell assembling. Moreover, it absorbs shocks and vibration given to the fuel cell system. Therefore, it is useful for automobile fuel cells which are normally subject to vibrations and shocks during operation.

IPC 1-7

H01M 8/02

IPC 8 full level

H01M 8/02 (2006.01)

CPC (source: EP US)

H01M 8/0213 (2013.01 - EP US); **H01M 2300/0082** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP)

Cited by

EP1298748A3; WO03094272A3; WO03056647A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 1094534 A2 20010425; CA 2323835 A1 20010420; US 6593021 B1 20030715

DOCDB simple family (application)

EP 00309282 A 20001020; CA 2323835 A 20001019; US 69210600 A 20001020